MAIL STOP AF
PATENT
8004-1013

IN THE U.S. PATENT AND TRADEMARK OFFICE

In re application of

Hiroaki TANAKA et al. Conf. 4276

Application No. 10/028,778 Group 2826

Filed December 28, 2001 Examiner Fazli Erdem

ACTIVE MATRIX ADDRESSING LIQUID-CRYSTAL DISPLAY DEVICE

PRE-APPEAL BRIEF REQUEST FOR REVIEW

Assistant Commissioner for Patents June 18, 2009
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Appellants request a pre-appeal brief review of the final rejection in the above-identified application. No amendments are being filed with this request.

A Notice of Appeal is filed herewith.

The review is requested for the reasons advanced on the attached pages.

Respectfully submitted,

YOUNG & THOMPSON

/Liam McDowell/

Liam McDowell, Reg. No. 44,231
209 Madison Street, Suite 500
Alexandria, VA 22314
Telephone (703) 521-2297
Telefax (703) 685-0573

LM/lrs

REMARKS

Claims 54-60 are pending in the application. Claim 54 is the only independent claim and is the subject of the present request for a pre-appeal brief review.

Claims 54-56, 58 and 60 were rejected under 35 USC 103(a) over ABE et al. 6,661,476 in view of SHIMADA et al. 6,448,578 and further in view of FUJIKAWA 6,414,738.

With respect to Figure 7 of ABE, reproduced below, ABE discloses a lead-out electrode 16 having layers 41a and 41b. As disclosed on column 11, lines 28-32 of ABE, a portion of inter-layer insulating film 42 is removed from lead-out electrode 16 during formation of the device to temporarily expose a top surface of TiN film 41b at contact hole 43. Then, an ITO film is formed over the entire inter-layer insulating film 42 (including contact hole 43) to form a pixel electrode 22 covering film 41b.

Fig. 7

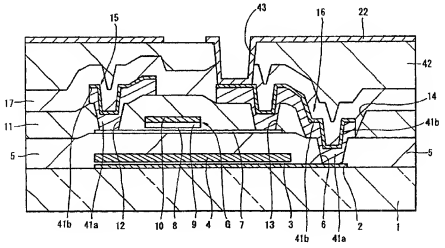


Figure 5 of FUJIKAWA, reproduced below, shows a first TiN film 14 and a second TiN film 15 covered with a second interlevel insulating film 11. A contact hole 103 is formed to temporarily expose a top surface of TiN film 15 and then a transparent display electrode 12 is formed over film 11 and in contact hole 103 to cover the previously exposed TiN film 15.

FIG. 5

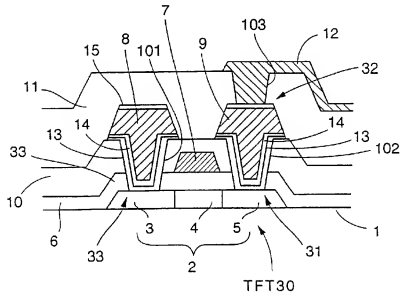
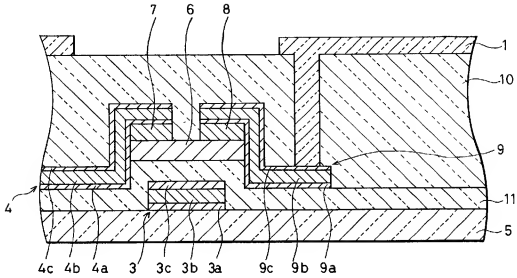


Figure 1 of SHIMADA, reproduced below, shows a multilevel structure 9a, 9b, 9c as a drain extraction electrode with top layer 9c being TiN. An interlayer insulating film 10 is formed over the layers 9a, 9b, 9c. A contact hole (unnumbered) is formed in the interlayer insulating film 10 so as to temporarily expose a top surface of layer 9c. Thereafter, a pixel electrode 1 is formed over interlayer insulating film 10

and in the contact hole to thereby cover the previously exposed top surface of layer 9c.

FIG.1



The position set forth in the Official Action is that the above-noted Figures and associated passages of the references that teach exposing the TiN film meets the recited: "the TiN film is exposed at each said terminal".

However, even if one of ordinary skill in the art were to consider the temporary exposure of the TiN film in the references as meeting the recited TiN film exposed at each said terminal, the proposed combination would not meet the present claims.

Claim 54 requires not only that the TiN film is exposed at each terminal, but also that a transparent conductive film is absent from the TiN film.

Indeed, these two requirements are part of the same feature and this portion of the claim recites: "wherein a transparent conductive film is absent from the TiN film so that the TiN film is exposed at each said terminal."

ABE, SHIMADA and FUJIKAWA fail to disclose or suggest that a transparent conductive film is absent from the TiN film so that the TiN film is exposed at each said terminal.

Rather, in ABE, ITO film 22 (transparent conductive film) covers the TiN film (see Figure 7 above). Similarly, transparent conductive pixel electrode film 1 (see column 6, lines 52-57) of SHIMADA covers TiN film 9c (see Figure 1 above) and transparent display electrode 12 of FUJIKAWA covers TiN films 14, 15 (see Figure 5 above).

Accordingly, a factual error exists in that the proposed combination of references does not result in the invention of claim 54.

The dependent claims are believed to be patentable at least for depending from an allowable independent claim.

The reference to NAKAMURA 6,096,572 is further applied to dependent claim 57. NAKAMURA does not overcome the shortcomings of the ABE/SHIMADA/FUJIKAWA combination set forth above with respect to claim 54. Claim 57 is believed to be patentable at least for depending from allowable independent claim 54.

The reference to MARIEB et al. 5,909,635 is further applied to dependent claim 59. MARIEB does not overcome the shortcomings of the ABE/SHIMADA/FUJIKAWA combination set forth above with respect to claim 54. Claim 59 is believed to be patentable at least for depending from allowable independent claim 54.

In view of the above, it is believed that the rejections of record include a factual error and cannot be sustained and must be reversed, and such is respectfully requested.

Respectfully submitted,

YOUNG & THOMPSON

/Liam McDowell/
Liam McDowell, Reg. No. 44,231
209 Madison Street, Suite 500
Alexandria, VA 22314
Telephone (703) 521-2297
Telefax (703) 685-0573
(703) 979-4709

LM/lrs